WHAT IS CLAIMED IS:

1. A method of manufacturing a microelectronic package, comprising:

providing a package substrate;

coupling a device substrate to the package substrate;

assembling a bifurcated mold around the device and package substrates, the bifurcated mold including a seal; and

encapsulating the device and package substrates employing the bifurcated mold.

2. The method of claim 1 wherein encapsulating the device and package substrates includes filling the bifurcated mold with encapsulant, wherein the seal prevents the encapsulant from adhering to the bifurcated mold.

3. The method of claim 1 wherein the seal comprises graphite.

4. The method of claim 1 wherein the seal comprises Teflon®.

5. The method of claim 1 wherein the seal comprises Kalrez®.

6. The method of claim 1 wherein the seal comprises a trench formed in the bifurcated mold and filled with sealant.

7. The method of claim 6 wherein a width of the trench ranges between about 0.5 mm and about 4 mm.

8. The method of claim 6 wherein a depth of the trench ranges between about 0.5 mm and about 4 mm.

9. The method of claim 1 wherein the seal is recessed within the bifurcated mold.

10. The method of claim 1 wherein assembling the bifurcated mold around the device and package substrates includes positioning the package substrate in an interior recess in the bifurcated mold configured to engage the package substrate.

11. A bifurcated microelectronic package assembly tool, comprising:
a base configured to fix an orientation of a package substrate;
a body configured to house a device substrate coupled to the package substrate; and
a seal coupled to one of the base and the body.

12. The bifurcated tool of claim 11 wherein the seal is a first seal coupled to the base, the bifurcated tool further comprising a second seal coupled to the body.

13. The bifurcated tool of claim 11 wherein the seal comprises graphite.

14. The bifurcated tool of claim 11 wherein the seal comprises Teflon®.

15. The bifurcated tool of claim 11 wherein the seal comprises Kalrez®.

16. The bifurcated tool of claim 11 wherein the seal comprises a trench formed in the one of the base and the body and filled with sealant.

17. The bifurcated tool of claim 16 wherein a width of the trench ranges between about 0.5 mm and about 4 mm.

18. The bifurcated tool of claim 16 wherein a depth of the trench ranges between about 0.5 mm and about 4 mm.

19. The bifurcated tool of claim 11 wherein the seal is recessed within the one of the base and the body.

20. The bifurcated tool of claim 11 wherein the foundation includes a recess configured to engage the package substrate.

21. A microelectronic package assembly tool, comprising:

a substantially planar plate;

a frame extending from a base, at least one of the base and the frame defining a cavity configured to receive a microelectronic device; and

a seal inlayed in an interior edge of the frame distal from the base.

22. The tool of claim 21 wherein the seal comprises a material selected from the group consisting of:

graphite;

Teflon®; and

Kalrez®.